

General

Guideline Title

Treatments for overactive bladder: focus on pharmacotherapy.

Bibliographic Source(s)

Society of Obstetricians and Gynaecologists of Canada (SOGC). SOGC clinical practice guidelines: treatments for overactive bladder: focus on pharmacotherapy. J Obstet Gynaecol Can. 2012 Nov;34(11):1092-101. [82 references]

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The quality of evidence (I-III) and classification of recommendations (A-L) are defined at the end of the "Major Recommendations" field.

Conservative Interventions

1. Behavioural management protocols and functional electrical stimulation should be offered in the spectrum of effective primary treatments for overactive bladder syndrome. (I-A)

Pharmacotherapeutic Interventions: Anticholinergics

Oxybutynin (Ditropan, Ditropan XL)

2. Oral oxybutynin, immediate and extended release, as well as transdermal oxybutynin, may be offered as treatment for overactive bladder syndrome, as they are associated with significant objective clinical improvement at 12 weeks. (I-A) Oxybutynin immediate release has superior cost effectiveness but more side effects than other anticholinergics. (I-A) Adverse events associated with transdermal oxybutynin are fewer than with oral oxybutynin. (I-A)

Tolterodine (Detrol, Detrol LA)

3. Tolterodine, immediate and extended release, may be offered as treatment for overactive bladder syndrome, as it is associated with significant objective clinical improvement at 12 weeks. (I-A)

Trospium (Trosec IR and XR)

4. Trospium, immediate and extended release, may be offered as treatment for overactive bladder syndrome as it is associated with significant

clinical improvement at 12 weeks. (I-A) Trospium is an adequate anticholinergic choice for overactive bladder syndrome patients with pre-existing cognitive impairment (II-B) and for overactive bladder syndrome patients taking concurrent CYP450 inhibitors. (III-B)

Solifenacin (VESIcare)

5. Solifenacin may be offered as treatment for overactive bladder syndrome, as it is associated with significant objective clinical improvement at 12 weeks. (I-A) Solifenacin may be an adequate anticholinergic choice for elderly overactive bladder syndrome patients or patients with pre-existing cognitive dysfunction. (I-B)

Darifenacin (Enablex)

6. Darifenacin may be offered as treatment for overactive bladder syndrome, as it is associated with significant objective clinical improvement at 12 weeks. (I-A) Darifenacin is an adequate anticholinergic choice for overactive bladder syndrome patients with pre-existing cardiac concerns or cognitive dysfunction. (I-B)

Clinical Efficacy: Anticholinergics Compared With Non-Drug Therapies

7. Overactive bladder syndrome patients should be offered a choice between bladder training, functional electric stimulation, and anticholinergic therapy, as there is no difference in cure rates. Combination therapy does not have a clear advantage over one therapy alone. (I-A)

Choice of Anticholinergic Drug and Dose

8. The choice of anticholinergic therapy should be guided by individual patient comorbidities, as objective efficacy of anticholinergic drugs is similar. (I-A) Dose escalation does not improve objective parameters and causes more anticholinergic adverse effects. It is, however, associated with improved subjective outcomes. (I-A) To decrease side effects, switching to a lower dose or using an extended release formulation or a transdermal delivery mechanism should be considered. (I-A)

Adherence and Continuation Rates

9. Education on treatment efficacy, realistic expectations, and length of treatment should be offered to patients upon initiation of anticholinergic therapy, as continuation rates for anticholinergic therapy are low. (III-B)

Pharmacotherapeutic Interventions: Estrogens

10. Oral or transdermal estrogen supplementation should not be recommended for treatment of overactive bladder syndrome as its effects are comparable to placebo. (I-E) Vaginal estrogen can be suggested for subjective improvements in overactive bladder syndrome symptoms. (III-B)

Refractory Overactive Bladder (OAB)

11. Intravesical botulinum toxin injection and sacral nerve and posterior tibial nerve stimulation are clinically effective options for patients with overactive bladder syndrome unresponsive to conservative options, anticholinergics, or vaginal estrogen. (I-A)

Definitions:

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly randomized controlled trial.

II-1: Evidence from well-designed controlled trials without randomization.

II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one center or research group.

II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category.

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.

Classification of Recommendations†

- A. There is good evidence to recommend the clinical preventive action.
- B. There is fair evidence to recommend the clinical preventive action.
- C. The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making.
- D. There is fair evidence to recommend against the clinical preventive action.
- E. There is good evidence to recommend against the clinical preventive action.
- L. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making.
- †Adapted from the Classification of Recommendations criteria described in The Canadian Task Force on Preventive Health Care.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Overactive bladder syndrome (OAB)

Guideline Category

Management

Treatment

Clinical Specialty

Family Practice

Internal Medicine

Obstetrics and Gynecology

Urology

Intended Users

Advanced Practice Nurses

Physician Assistants

Physicians

Guideline Objective(s)

- To provide guidelines for pharmacotherapy to treat overactive bladder syndrome (OAB)
- To provide understanding of current available evidence concerning safety and clinical efficacy of pharmacotherapy for OAB; to guide selection of anticholinergic therapy based on individual patient characteristics

Target Population

Women with overactive bladder syndrome (OAB)

Interventions and Practices Considered

1. Conservative interventions
 - Behavioural management protocols
 - Functional electrical stimulation
2. Pharmacotherapeutic interventions
 - Anticholinergics (oxybutynin, tolterodine, trospium, solifenacin, darifenacin)
 - Vaginal estrogen
3. Management of refractory overactive bladder (intravesical botulinum toxin injection, sacral nerve and posterior tibial nerve stimulation)

Major Outcomes Considered

- Rates of reduction in frequency, incontinence and urgency
- Side effects of medications
- Quality of life

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

The Cochrane Library and Medline were searched for articles published from 1950 to the present related to individual anticholinergic drugs. Review articles on management of refractory overactive bladder (OAB) were also examined. Results were restricted to systematic reviews, randomized control trials/controlled clinical trials, and observational studies. There were no date or language restrictions. Searches were updated on a regular basis and incorporated in the guideline to 2010.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly randomized controlled trial.

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III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

The quality of evidence was rated using the criteria described in the Report of the Canadian Task Force on Preventive Health Care (see the "Rating Scheme for the Strength of the Evidence" field).

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Classification of Recommendations†

A. There is good evidence to recommend the clinical preventive action.

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D. There is fair evidence to recommend against the clinical preventive action.

E. There is good evidence to recommend against the clinical preventive action.

L. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making.

†Adapted from the Classification of Recommendations criteria described in The Canadian Task Force on Preventive Health Care.

Cost Analysis

The guideline developers reviewed published cost analyses.

Oxybutynin immediate release has superior cost-effectiveness but more side effects than other anticholinergics.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

This clinical practice guideline has been prepared by the Urogynaecology Committee, reviewed by Family Practice Advisory Committee, and approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate use of pharmacotherapy for overactive bladder (OAB), to improve outcomes and minimize side effects of therapy

Potential Harms

Care providers need to be well acquainted with the side effects of anticholinergics and select therapy based on individual patient parameters.

Contraindications

Contraindications

- Absolute contraindications to anticholinergic use include urinary retention, gastric retention, uncontrolled narrow-angle glaucoma, and known hypersensitivity to the individual drugs or any of their ingredients.
- Relative contraindications that warrant cautious use include partial bladder outlet obstruction (borderline or high post-void residuals), controlled narrow-angle glaucoma, impaired cognitive function, reduced renal or hepatic function, concomitant excessive alcohol use (added sedating effects), decreased gastrointestinal motility, constipation, and myasthenia gravis. Elderly patients in particular should be monitored for drug interactions or polypharmacy of drugs with anticholinergic effect (e.g., antidepressants, antipsychotics, anxiolytics), as the overall anticholinergic load is associated with confusion, falls, and fractures. Anticholinergics are category C drugs in pregnancy, to be used only if the benefits clearly outweigh the risk.

Qualifying Statements

Qualifying Statements

This document reflects emerging clinical and scientific advances on the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level. None of these contents may be reproduced in any form without prior written permission of the Society of Obstetricians and Gynaecologists of Canada (SOGC).

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Foreign Language Translations

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2012 Nov

Guideline Developer(s)

Society of Obstetricians and Gynaecologists of Canada - Medical Specialty Society

Source(s) of Funding

Society of Obstetricians and Gynaecologists of Canada

Guideline Committee

Urogynaecology Committee

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

Disclosure statements have been received from all members of the committee.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available from the [Society of Obstetricians and Gynaecologists of Canada Web site](#) . Also available in French from the [SOGC Web site](#) .

Print copies: Available from the Society of Obstetricians and Gynaecologists of Canada, La société des obstétriciens et gynécologues du Canada (SOGC) 780 promenade Echo Drive Ottawa, ON K1S 5R7 (Canada); Phone: 1-800-561-2416.

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on February 26, 2013. The information was verified by the guideline developer on March 21, 2013.

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